APPENDIX

ELECTRICAL SYMBOLS

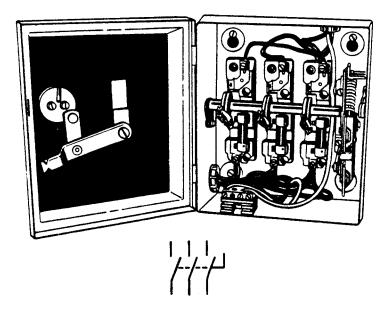


FIGURE A-1. Disconnect.

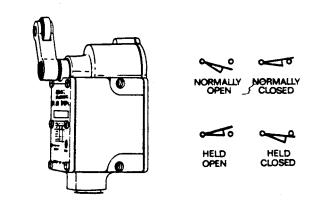


FIGURE A-2. Limit Switches.



FIGURE A-3. Flow Switch (Air, Water, and So Forth).

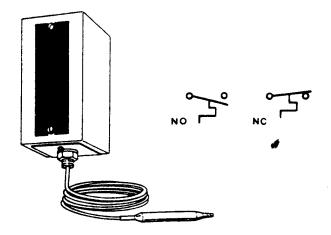


FIGURE A-4. Temperature-Actuated Switch.

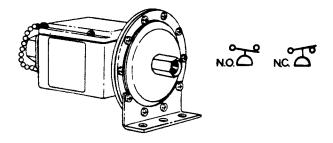


FIGURE A-5. Pressure and Vacuum Switches.

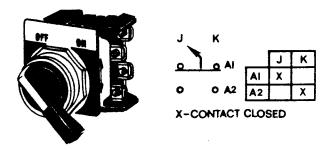


FIGURE A-6. Selector Switch, 2-Position.

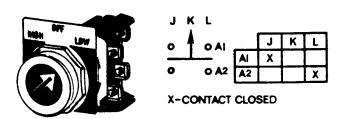


FIGURE A-7. Selector Switch, 3-Position.

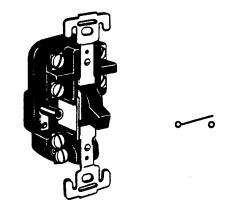


FIGURE A-8. Toggle Switch.

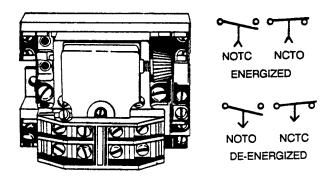


FIGURE A-9. Pneumatic Timer.

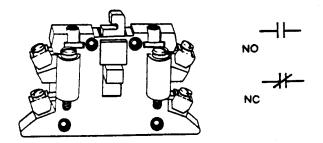


FIGURE A-10. Auxiliary Contacts.

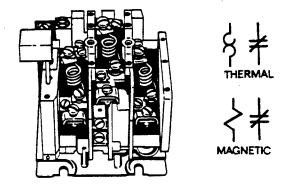


FIGURE A-11. Overload Relays.

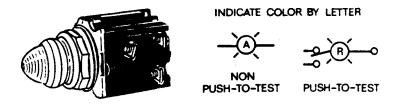


FIGURE A-12. Pilot Lights.

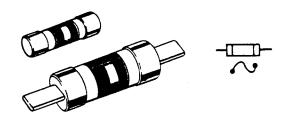


FIGURE A-13. Fuse Power or Control.

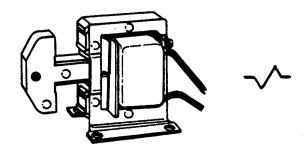


FIGURE A-14. Solenoid.

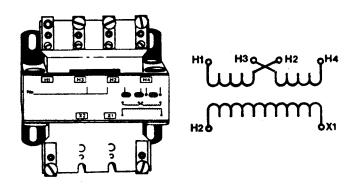


FIGURE A-15. Control Transformer.

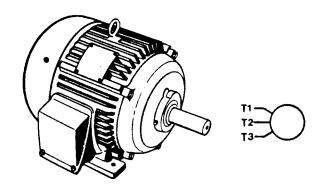


FIGURE A-16. Three-Phase Motor.

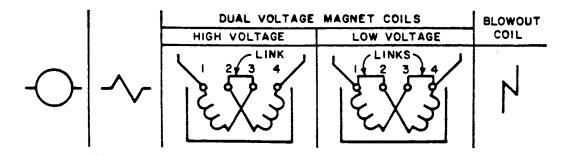


FIGURE A-17. Coil.

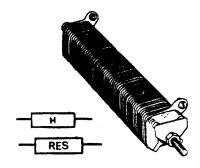


FIGURE A-18. Fixed Resistor; Heating Element.

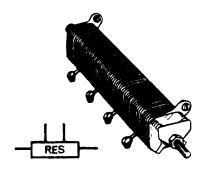


FIGURE A-19. Tapped Resistor.

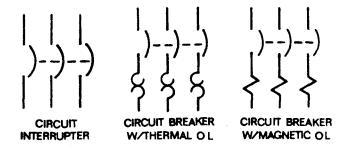


FIGURE A-20. Circuit Interrupter and Circuit Breakers.



FIGURE A-21. Foot Switches.

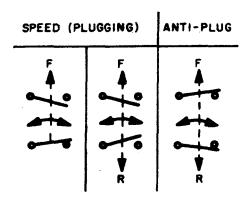


FIGURE A-22. Speed (Plugging); Anti-Plug.

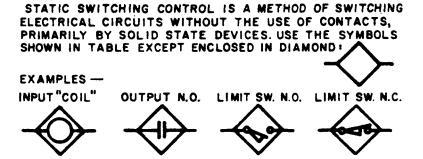


FIGURE A-23. Symbols for Static Switching Control Devices.

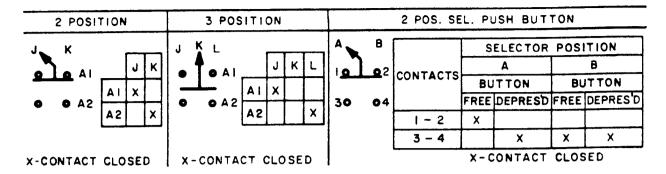


FIGURE A-24. Selector.

MOMENTARY CONTACT			MAINTAINED CONTACT		ILLUMINATED	
SINGLE	DOUBLE CIRCUIT	MUSHROOM HE AD	WOBBLE STICK	TWO SINGLE	ONE DOUBLE	_``@`_
N. O.	N.O.& N.C.	<u>.</u> T.	ه ا ه	CIRCUIT	CIRCUIT	ملٰه
<u>a l a</u>	• •			0 0	• [• ⊥ -> ⊥	• •

FIGURE A-25. Push Buttons.

ARMATURE	SHUNT FIELD	SERIES FIELD	COMM. OR COMPENS. FIELD
-(ARM)-	\mathcal{T}	%	~
	(SHOW 4 LOOPS)	(SHOW 3 LOOPS)	(SHOW 2 LOOPS)

FIGURE A-26. DC Motors.

NOT CONNECTED	POWER	WIRING TERMINAL	
+		0	
+		4	
CONNECTED	CONTROL	GROUND	

FIGURE A-27. Wiring.

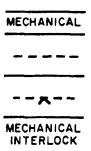


FIGURE A-28. Connections.

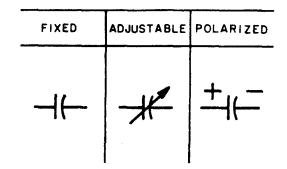


FIGURE A-29. Capacitors.



FIGURE A-30. Bell.



FIGURE A-31. Buzzer.



FIGURE A-32. Horn.



FIGURE A-33. Half-Wave Rectifier.

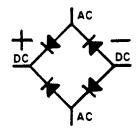


FIGURE A-34. Full-Wave Rectifier.



FIGURE A-35. Battery.



FIGURE A-36. Thermocouple.

DIODE	TUNNEL DIODE	UNIDIRECTIONAL BREAKDOWN (ZENER) DIODE
+	*	+

FIGURE A-37. Semiconductors.